

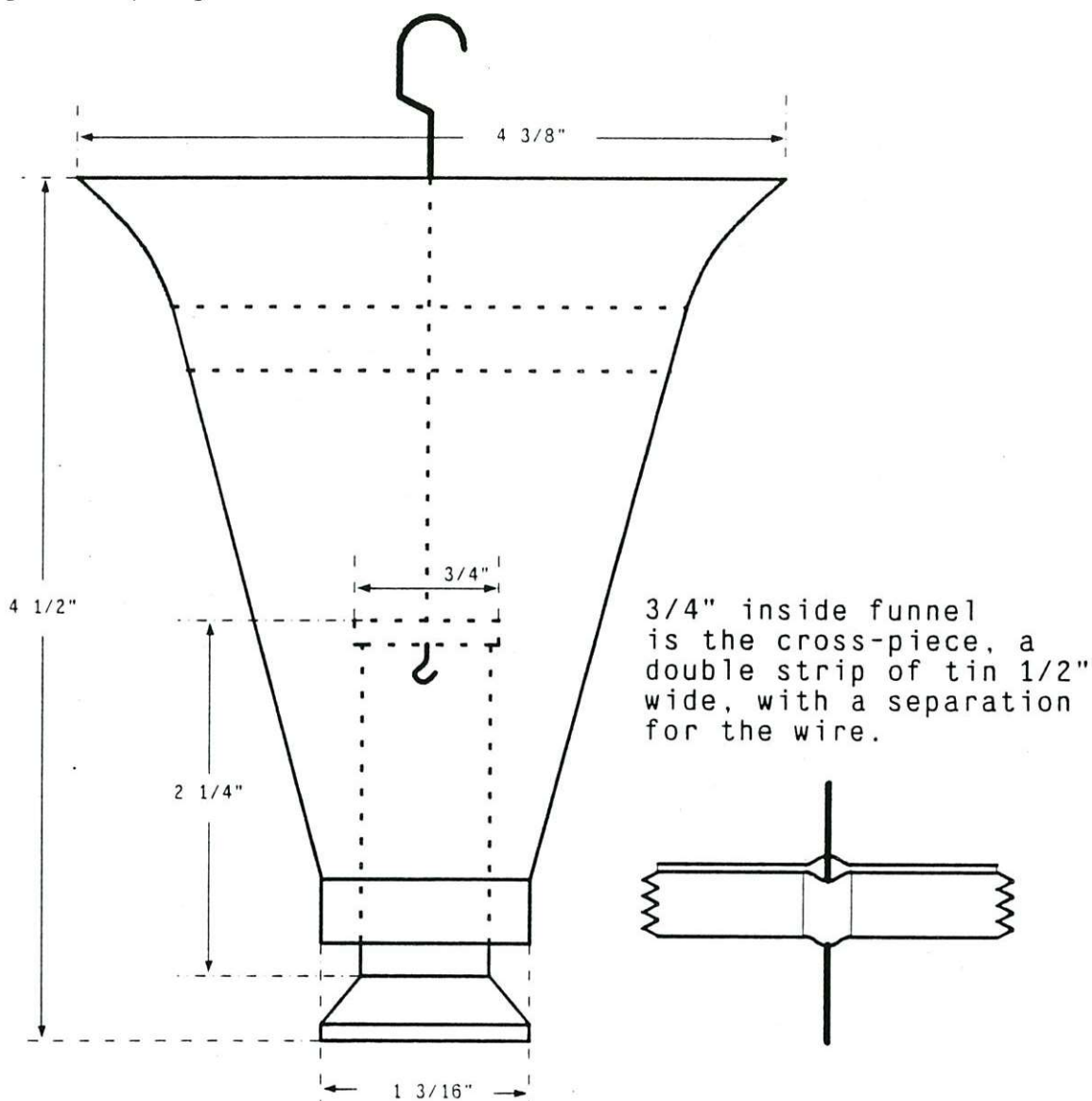
Carbide Dispensers by Jim VanFleet

As with most new technology, the carbide lamp met with resistance when first introduced, due in part to the new difficulties of operating the lamps. It would seem that filling the lamp with carbide was the least of these, but apparently, some saw the need for a mechanical means of filling lamps. One result was the "carbide funnel," pictured below, designed to fill a single lamp base with a charge of carbide. The funnel is too large for cap lamp bases and may have been designed for either hand lamps or half-shift lamps. The funnel is made of 7 tin components, neatly soldered, and bears a printed label for its use:

DIRECTIONS for the use of FILLER FUNNEL

Drop into neck of lamp ... (unreadable) ... is removed and pour carbide into funnel until the carbide stops running; then hold funnel down with one hand and raise the wire ring in the middle of the funnel with the other hand and lift out of the lamp by the wire ring and set it in the carbide can and the carbide in the funnel will run back into the can. This insures the filling of the lamp to the proper level each time.

When placing the funnel into the lamp see that the wire ring is down to the cross-piece in the funnel to insure its being open so that the carbide will run into the lamp, and when removing the funnel from the lamp be sure that the wire ring is drawn up so it is closed. Always lift out of the lamp by the wire ring to avoid spilling carbide.



The next step in this line of thinking was the regulation of the amount of carbide miners were allowed to use on their shift. Details of Practical Mining, 1916, includes a plan for a "carbide container and measurer" used by the Republic Iron and Steel Co. to fill miner's carbide tins with "enough carbide to last one shift," boasting that "consumption has been reduced nearly one-half."

Carbide Container and Measurer (By E. W. R. Butcher).—With the introduction of carbide lamps, it has been found unsatisfactory to allow the miners to help themselves from the carbide cans. The Republic Iron & Steel Co. therefore furnishes each of its miners with a small screw-top can which holds enough carbide to last one shift. These cans are filled from the carbide container, a drawing of which is shown

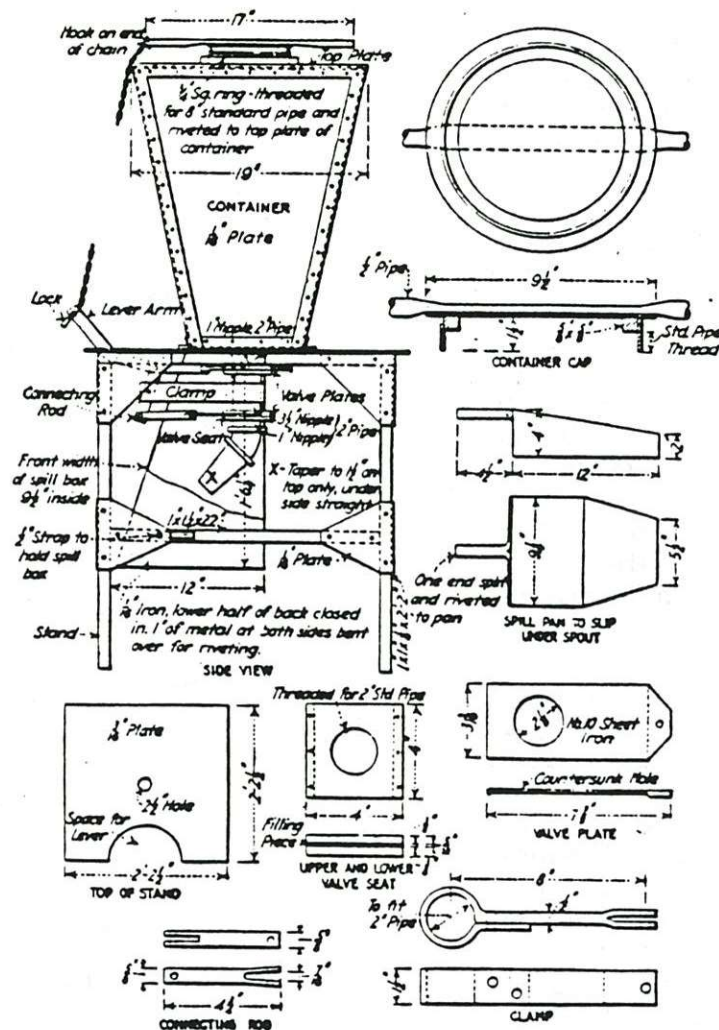


FIG. 26.—ASSEMBLED CARBIDE CONTAINER AND DETAILS OF CERTAIN PARTS.

in Fig. 26. By means of the valves, one motion of the lever arm, up or down, gives out just enough carbide to fill a miner's can. The spill pan is used to catch any carbide which falls. Since the container has been in use, the carbide consumption has been reduced nearly one-half.